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ABSTRACT

The transcript of a four-part radio program on learning disabilities (LD) focuses on issues involving the definition, identification, and education of LD children. Definitional concerns are voiced by J. Gallagher, S. Kirk and S. Richardson. Controversy over prevalence estimates is discussed. Teachers of LD children comment on effective identification and education strategies for dyslexic and LD students. Teacher training is examined by M. Frostig and J. Gallagher. Reactions of an LD elementary student and an LD adult are cited. Other topics covered include reading and emotional problems of LD students, dangers in labelling children LD, and the teacher's role in working with LD students. (CL)

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Part I, II, III and IV

"LEARNING DISABILITIES"
PART I

TABLE OF CONTENTS

	PAGE
INTRODUCTION	1
ESTABLISHING A DEFINITION OF "LEARNING DISABLED"	
REFINING THE ACCEPTED DEFINITION OF LEARNING DISABLED Dr. James Gallagher, director of the Frank Porter Graham Child Development Center in North Carolina	2
TEACHING THE LEARNING DISABLED Davis, an eight year old learning disabled child with teacher, Dorothy Tyack, of the San Francisco State University	2-4
THE NUMBERS AND SEVERITY OF LEARNING DISABLED CHILDREN Dr. James Gallagher, director of the Frank Porter Graham Child Development Center	4-5
A TEACHER OF LD CHILDREN COMMENTS ON METHODS OF INSTRUCTION Kris Glicken, teacher in Naperville, Illinois	5-6
IDENTIFYING AND HELPING THE DYSLEXIC CHILD Fred Crouch, special education teacher	6-7
THERAPIST CRITICIZES MEDICAL LABELLING OF THE LD STUDENT Dr. Mario Pascia, director of the Frostig Center in Los Angeles, California	7-8
CLOSE TEACHER ATTENTION: THE KEY TO HELPING THE LD CHILD Samuel Kirk of the University of Arizona	8-9
SYMBOL ASSOCIATION IN THE TRAINING OF THE LD CHILD Robert Gottsleben, a teacher of the Scottish Rite Institute in San Francisco	9-10

CHILD: Duck.

TEACHER: Michael, it's....

CHILD: Dick. Like. Its. Lift.

TEACHER: Lift.

CHILD: Its. Tub. At. Went.

TEACHER: Aaah. Do you know this...?

CHILD: Went....

TEACHER: No, that's aaah.

CHILD: Aaah, and.

TEACHER: Good. And. What goes after it's, tub, and...?

CHILD: "Rank."

TEACHER: Raaa....

CHILD: Rag.

MERROW: That boy, who's nine years old, a fourth grader, is not a very good reader. In fact, he's a pretty poor one.

REINHARDT: But why? Is he not very bright? A slow learner? Or maybe he's been stuck with bad teachers.

MERROW: Well, those are all possibilities. But in his case, none is correct. He reads poorly because he has a learning disability.

TEACHER: What does that say?

CHILD: Rag.

TEACHER: Good. Dick got a rag....

CHILD: At -- and a turtle.

REINHARDT: I'm Barbara Reinhardt.

ESTABLISHING A DEFINITION OF "LEARNING DISABLED"

MERROW: I'm John Merrow. This week on OPTIONS IN EDUCATION, we're going to look into the strange and disturbing education of the learning disabled.

REINHARDT: We use those adjectives, "strange" and "disturbing," with good reason. First, nobody really knows how many learning disabled children there are. Estimates range from about half a million to ten million.

MERROW: Second, there's a lot of disagreement about what a learning disability is.

REINHARDT: If you want a common sense definition, try this. A learning disabled child is one who seems bright and who's able to learn most things, but who can't seem to learn in one subject area.

MERROW: Good in arithmetic, but poor in reading, for instance.

REINHARDT: Or vice-versa.

MERROW: Forty years ago, these kids were called slow learners, or late bloomers, or maybe just unmotivated.

REINHARDT: Or maybe mentally retarded.

MERROW: But in the early 1950s, the term "learning disability" took hold. It's an umbrella for a lot of specific problems: dyslexia, aphasia, minimal brain dysfunction.

REINHARDT: Today, schools may be grouping a lot of kids who have learning problems under that term, "learning disability." That's another part of the controversy.

MERROW: Because not everybody who learns with difficulty is learning disabled.

REINHARDT: And you are not learning disabled just because your father went to Harvard and you didn't, or because your sister is an ace in math and you're just average.

MERROW: But rather than define "learning disability" by what it is not, let's go to an accepted textbook definition of the term.

REFINING THE ACCEPTED DEFINITION OF LEARNING DISABLED

REINHARDT: James Gallagher directs the Frank Porter Graham Child Development Center in North Carolina. He reads and comments on the definition written by the National Advisory Committee on Handicapped Children.

GALLAGHER: Children with special learning disabilities exhibit a disorder in one or more of the basic psychological processes involving understanding or using spoken or written language. So it's a language problem. These may be manifested in disorders of listening, thinking, talking, reading, writing, spelling or arithmetic. They include conditions that may be referred to as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and so forth. They do not include learning problems due primarily to visual problems, hearing problems, or mental retardation or emotional disturbance.

So what you have are youngsters that have a special learning problem, but it cannot be identified through any of these other means. The learning disabilities' youngster may very well test average or above average on measures of intellectual ability, but may have some special deficit, some special problem in the area of development that's keeping them from learning.

For example, they might have an auditory perceptual problem. And what that means is that they may hear sounds, but they cannot interpret them. And so what they hear is noise. And obviously if you have problems with interpreting sounds in your environment, you're not going to do very well in school. And so that youngster needs very special kinds of exercises and programming in order to help develop those skills, or develop their other skills to a better level.

REINHARDT: Dr. James Gallagher, interviewed for OPTIONS IN EDUCATION by Barbara Bernhard.

MERROW: Gallagher, like others in the field, is quick to point out that learning disability, LD, does not mean either mental retardation or emotional disturbance.

TEACHING THE LEARNING DISABLED

TYACK: Okay, are you ready? Here we go. "Here the boy is waking up." What did he do?

DAVIS: Wake.

TYACK: Not quite.

DAVIS: He woke.

TYACK: Good. And you're saying the whole thing this time, right? He woke. "This girl is eating some toast." What did she do?

DAVIS: Ate.

TYACK: Tell me the whole thing.

MERROW: Davis is eight and learning disabled. He's working with his special education teacher, Dorothy Tyack.

TYACK: Very nice. "These people are swimming in the water." What did they do?

DAVIS: They swam.

TYACK: Very nice. They swam. That's absolutely right. "This lady is drinking a glass of water." What did she do?

DAVIS: She drank.

TYACK: Very, very nice. "This lady is seeing a flat tire." What did she do?

DAVIS: She saw.

TYACK: Very nice. She saw....

DAVIS: A flat wheel.

TYACK: Good. "This lady is eating corn." What did she do?

DAVIS: She ate.

TYACK: Good. What did she eat?

DAVIS: She ate corn.

TYACK: "These geese are standing in the farm yard." What did they do?

DAVIS: They stand.

TYACK: Not quite. Try it again.

DAVIS: They stood.

TYACK: That's right, they stood. Very nice. "This lady is seeing a red vest." What did she do?

DAVIS: She saw a red vest.

TYACK: Good.

What you saw me working on today was formation of past tense -- irregular past tense verbs. What he was doing initially, when you asked him what he did yesterday or last weekend, was he was answering in single

words, like he'd say "parade" or "Chinatown."

WISSEL: And what do you try and get him to do?

TYACK: Well, if I tried to get him to put the verb in, he'd say "We go Chinatown," which could mean "We went to Chinatown," "We are going to Chinatown," or "We will go to Chinatown." So my job now, I think, is to try to teach him those verb forms which will allow him to talk about the past or the present or the future.

WISSEL: Is it just that he hasn't learned those verb forms....

TYACK: Yes.

WISSEL: ...or he has difficulty picking them up and remembering them?

TYACK: Well, no. I mean, from hearing words around him, he has not inferred those linguistic rules. So what I'm doing is I'm following a sequence of normal language acquisition. We know that little children, like two and a half year olds, first learn unmarked verbs like come and make, and then they learn irregular past tense verbs, and then they learn regular past tense verbs, and, at that time, they start overgeneralizing and they'll say "We camed home" or "We maked something." And then they finally get it all straightened out as to what's irregular past tense and what's regular past tense. But I'm trying to straighten out, just one by one, the different kinds of past tense verbs.

MERROW: Dorothy Tyack teaches at a special clinic for learning disabled children at San Francisco State University. She was interviewed for OPTIONS IN EDUCATION by Paula Wissel.

* * *

THE NUMBERS AND SEVERITY OF LEARNING DISABLED CHILDREN

REINHARDT: Davis is labelled dyslexic. But a lot of people in the learning disabled field won't even use the term "dyslexia" or any other medical terms, like aphasia, discalculia. Their standard response is "Those are medical terms, and I'm not a doctor. For me, learning disability is a learning problem, not a medical problem. And so we use only educational terms."

MERROW: That's part of the controversy over definition. Just what is a learning disability and who's better qualified to detect it, doctors or teachers?

REINHARDT: Disagreement over definition leads to disagreement about numbers as well. How many LD kids are there? Some experts say half a million; some, ten million.

MERROW: Again, James Gallagher.

GALLAGHER: That's a great source of contention in the field, and the estimates range anywhere from one percent to twenty percent. Yes. And what that generally means is there's a disagreement as to how severe the case has to be before it's called "learning disabilities." For those that talk about one percent of the youngsters, they're talking about youngsters that have a severe deficit in one of these skill areas. And they're not really going to respond well to the school without very intensive remedial and special remedial work. When people talk about twenty percent of the youngsters being learning disabled, they're kind of grouping together all the youngsters that are have troubles learning from whatever cause in the schools. And it may be that they didn't get good instruction in the first grade in reading, and so now they're not able to read effectively. Or maybe they're not highly motivated by circumstances in their family, or what have you. And so they're not

learning. And so you bunch together all of the youngsters who are having trouble in the schools and you call them all learning disabilities, and that will get you twenty percent. Or you can take the milder versions of the more severe case that we're talking about, and you add those up and you get a very substantial proportion of youngsters.

BERNHARD: Which area do you subscribe to in the one-or-twenty-percent theory?

GALLAGHER: I lean towards the one or two percent.

REINHARDT: Dr. James Gallagher of the Frank Porter Graham Child Development Center in North Carolina talking with Barbara Bernhard.

MERROW: There is one headcount that may be reliable, and that's the one done in the states that have applied for federal money. This year, the federal government is providing $156.00 for each learning disabled child served by the schools.

REINHARDT: The money is parceled out according to how LD kids the schools served last year. That number: 969,000, almost one million.

MERROW: There're close to fifty million kids in school, so that works out to two percent who are labelled LD.

REINHARDT: Incidentally, the extra $156.00 isn't very much money, if you consider the costs for special teachers and facilities. Average yearly cost per school child is $1600. The extra cost for a learning disabled child is -- and this is the lowest estimate -- an additional $1200. It may be as much as $2800 additional. So that federal money, $156.00, doesn't go far.

A TEACHER OF LD CHILDREN COMMENTS ON METHODS OF INSTRUCTION

MERROW: Most of the money goes for LD teachers. Typically, they'll have only two to six kids per class. Kris Glicken, who teaches in Naperville, Illinois, needs a small class so she can work with students individually.

GLICKEN: Okay. I have a third grader right now who I've been working with for two years. He has repeated third grade since working with me. His main problem is spelling. He would spell words as basically consonants, no vowels, or he'd stick in vowels strange ways.

MERROW: And he'd spell horse, H-R-S?

GLICKEN: He'd maybe stick an "O" in there above the line, you know, just -- it didn't make much sense. His daily writing could not be read. I've worked with -- well, there're many methods that are questionable. You know, I've worked with him tracing letters, and I've worked with sound symbol relationships and trying to bring in the visual memory for what he's reading. Basically, I'm trying to get him to understand a word and to be able to break it down into parts and hear the parts, and then transfer what he has heard and what he knows in his brain into what he's writing. He's got to remember it that long. It seems a second to us, but it can be very long for some of these kids.

MERROW: And what kind of success are you having?

GLICKEN: Well, last year, we worked basically on a small group of words. I took word lists from the classroom to get him to be successful in the classroom. And they're starting to fight. It can be a very traumatic day for some of these children. Right now we've been working on other words, words that children use in sixty percent of their daily handwriting. They're called lexical words: I, and, was, to, in, of.

MERROW: Can he spell those words?

GLICKEN: Yes. He's gotten -- he's mastering about 75 to 80% of those words now. And also, you can just see in his daily writing that he is -- he has gained an understanding for the sound symbol relationship and is able to sequence the sounds as they should be in a word.

MERROW: Is it possible that he's just compensating for the deficit, that he's learned enough about you and enough about those words that he's memorized those words and knows how to just regurgitate what he knows you're going to ask him to do.

GLICKEN: It could be if we were just dealing with those words. But I'm asking him to write a paragraph for me on his favorite animal, or anything. And these are words that I can't control. And he's able to come up with their spelling, having not studied them.

MERROW: Now what's wrong with him? What's his learning disability? Is there a name for it?

GLICKEN: I don't know if I can come up with it in a second, you know, because we're dealing with so many kids. But his breakdown is, I would probably say, auditory processing.

REINHARDT: Kris Glicken, a teacher of learning disabled children in Naperville, Illinois. You may have detected her reluctance to label her student. She's content to know what he cannot do in his regular class and how best to correct those problems. She doesn't need to use a medical label.

MERROW: What's it like to be learning disabled? Well, for one thing, it's frustrating. You know you're bright enough, but you just can't get it. So you blame yourself and begin to believe you're stupid.

REINHARDT: But let's not tell you. Let's let you find out.

MERROW: You'll need a pencil, a piece of paper and a mirror.

* * *

IDENTIFYING AND HELPING THE DYSLEXIC CHILD

REINHARDT: This is called the mirror test, and it's often given to teachers so they'll know how their LD students see things.

MERROW: Got the pencil, paper and mirror? Okay. Hold the paper up against your forehead.

REINHARDT: Now look into the mirror.

MERROW: Take the pencil in your hand and write the word "HELP" on the paper as you look in the mirror.

REINHARDT: You can print, if you want....

MERROW: In capital letters....

REINHARDT: To make it easier.

Test is over. Now take a look at what you wrote.

MERROW: Any letters backwards? Upside down?

REINHARDT: We know, because we took the test ourselves, that your writing is a mess.

MERROW: Let's do one more test, this time with some encouragement from us.

REINHARDT: This time write your name. Same rules. Put the paper against your forehead and look in the mirror.

MERROW: Come on, work a little faster.

REINHARDT: I don't think you're paying attention.

MERROW: You're holding up the entire class. Do you realize that?

REINHARDT: I'm going to have to send a note home to your parents about your work and study habits.

MERROW: I don't think you're really trying. You think we have all day?

REINHARDT: That was a bit harder, wasn't it?

MERROW: Especially if you're named is Barbara or Natalie.

REINHARDT: You're lucky, John.

MERROW: We took that example from a book by Dr. Alan Ross, called The Unrealized Potential. Incidentally, the transcript of this four-part series lists dozens of books and articles about learning disabilities. We'll tell you how to get a copy later in the program.

REINHARDT: Teachers may need a test like that for consciousness raising. That is, many aren't trained to understand and be sympathetic toward LD kids. That's what one specialist, Fred Crouch, told Diane Rehm.

CROUCH: The typical teacher will identify this child as lazy, or they will identify the child as, "Well, he could really do it, but he just doesn't have the get-up-and-go, and he's not eating right," and these sort of explanations for poor achievement in the classroom. And it must be incredibly frustrating for these kids to sit in these classes and to realize that they probably know more about what's going on, especially if it's been a lecture situation or movies or slides, and then to flunk the test and see their peers, who know less than they do, scoring grades that are much higher.

REHM: Are we talking primarily about boys?

CROUCH: We are primarily talking about boys. About 85% of the dyslexic students are boys. I believe that of the other specific learning/reading disabilities, the percentage is not 85% male; it's probably 60 or 70% male. But most of your dyslexic students are males.

One interesting thing is that a lot of these kids can remember lines from a movie that they saw two years ago and literally memorize whole films and books. And a lot of times I think this is why they aren't identified any earlier is because they are so bright, and everybody assumes, well, this is a bright child, and there's obviously nothing wrong with him, because they assume that being dyslexic may be synonymous with having a low IQ, which is also a problem for our students. I think a lot of our students, after we identify them, have a real problem with their self-image. And that's one of the most important things, I believe, in my class, and certainly in all the classes, is for the teacher to continually remind the students and show them how bright they are and go over what dyslexia is and what we're doing for them, and what they can do for themselves.

THERAPIST CRITICIZES MEDICAL LABELLING OF THE LD STUDENT

MERROW: Some special education teachers, like Fred Crouch, are at ease

with medical terms like dyslexia. But as we mentioned, other therapists think labels can do more harm than good. In fact, Dr. Marie Pascal of the Frostig Center in California wouldn't even list the medical terms for me.

PASCAL: ...m reluctant to do that, because I don't believe in those names. I don't believe in those kinds of labels that are used on children, because the label doesn't tell us anything more about the whole child. We're really talking about looking at a child from the whole point of view, meaning his overall development. And then there are these specific kinds of problems that may emerge. And oftentimes when we use one of those commonly used terms or labels, that doesn't answer the question, because the basic question is, "What does the child need, then, to help him overcome the problem and achieve to his full potential?"

So that a term like dyslexia, which is not an educational term, but it is a medical term: that means simply a reading disability. Or dyscalculia is another medical term that means a child is having problems with arithmetic, arithmetic reasoning and arithmetic skills. That doesn't answer the question again of what kind of intervention, what kind of educational and/or medical program does that child need.

REINHARDT: Dr. Mario Pascal, Director of the Frostig Center in Los Angeles, California.

CLOSE TEACHER ATTENTION: THE KEY TO HELPING THE LD CHILD

MERROW: So it may not be labels that are important, but, rather, close, personal attention from teachers.

KIRK: I did that for four years in an institution. And it was rather interesting that many of these children changed in personality because I gave them so much attention. I showed them success at every step, every day.

REINHARDT: Samuel Kirk of the University of Arizona.

KIRK: I ran a school for young mentally retarded children. They were diagnosed by pediatricians, psychologists. Their IQs were low. There was something with them at the age of four and five. I had one girl who had poor vision, nystagmus, classified as legally blind, mentally retarded. They couldn't get her into an institution.

When I looked her over, I found out she had a fairly good vocabulary, higher than the IQ of forty they gave me. But she couldn't see too well, because she had nystagmus and poor vision as a result of rubella. My diagnosis was, after trying her out, that she had poor speed of perception, which meant that if I showed her a picture of a chair and I said to her, "Sharon, this is a chair," she said "chair." And then I showed her another picture and gave her the name. And when I came back to chair, her eyes would jump, jump, jump, jump. And you know, after a quarter of a second or so, she would say chair. And then I would show her another picture. A little later she'd say "ball." In other words, her response to visual stimuli was very sluggish and very slow, probably due to the nystagmus. And I said "Let's train her vision." We put her on a tachistoscope and we worked with her for six solid months, about a half-hour a day. At the end of that time she could respond to pictures in 1/25th of a second, very rapidly. At the same time, they transferred her to the classroom, and this girl was able to tell us all kinds of things in pictures.

I had another child that couldn't understand anything. We had to do auditory training with her in the same way as we did visual training, and both of them came up. And by the age of six, six and a half, they went into school and succeeded, maybe not as much as a normal child, but a long way from their original diagnosis. Those are the children we ought to be

working with in learning disabilities, which we are not, because we devote so much of our time to the minor problems in school that I think the elementary teacher can handle.

MERROW: The stories you've just told indicate that those are physical problems at the basis of that learning disability. You had to work with the perception, to speed up the perception; you had auditory problems. Is that the case with most learning disabilities, that there's a physical basis for it?

KIRK: Many people infer that the brain isn't functioning properly with these children. Now most of the time neurologists can't tell us why. But some of them with evoked potential and EEGs are trying to find the difficulty in the brain. As an educator, we're not going to wait until they've discovered what's wrong with the brain that causes a child that doesn't see fast or doesn't learn to read. We have to start where the child is and do the best we can in training him. Hopefully, some day, we will be able to diagnose brain function. We'll be able to find out what this brain function is doing to psychological response, and hopefully set up an educational program to ameliorate or help this process. And maybe we can train the brain to work a little better in some way or other.

So when we're able to connect education with psychology, with neurology, we'll have reached the ultimate. Today there's a big gap between neurology and psychology. How do you explain psychological behavior from neurological function? How do you do something educationally as a result of psychological defect? There are gaps all the way through.

REINHARDT: Samuel Kirk is the man credited with inventing the term "learning disability." He's now teaching at the University of Arizona.

SYMBOL ASSOCIATION IN THE TRAINING OF THE LD CHILD

GOTTSLEBEN: I think most children, most normal children, learn some symbol associations, such as that the sound "kaa" goes with the letter "K." They are able to abstract that from various "sight" words that the teacher might present, such as she might present the word kite. And most normal kids will know just by looking at that that the "kaa" goes with the letter "K."

REINHARDT: Robert Gottsleben, a teacher at the Scottish Rite Institute in San Francisco.

GOTTSLEBEN: We're very careful to control syntax, and we're also very careful to have all of the children work at about a ninety percent level of success, meaning that they make very few errors.

WISSEL: How do you manage that?

GOTTSLEBEN: Well, you manage that, first of all, by doing very careful testing before you start working to find out what the child's base line skills are. And then you start with what he's able to do and very carefully introduce new material. And if he starts making a lot of errors, you're going to have to backtrack. It means that you didn't armchair the lesson properly, and you made it too difficult.

WISSEL: Okay. Why are you doing that? Because you don't want him to feel like a failure?

GOTTSLEBEN: Because most of the kids who come here have been subjected to three or four different styles of teaching reading, and they failed. And most of the kids are really turned off on reading, just like you and I are turned off on things we don't do well. And we avoid them. Kids can't avoid things they don't do well. We force them right into it. So we turn it from a failure into a success by controlling the materials.

RONNIE: Ink. Unc. Unc. Ink. Un. En. In.

GOTTSLEBEN: Um....

* * *

REINHARDT: Reporter Paula Wissel visited Ronnie, who is ten, at the Scottish Rite Institute for Childhood Aphasia in San Francisco.

MERROW: As this series continues, we'll hear more children, and some adults, with learning disabilities. We'll also hear some plans for training teachers to recognize learning disabled kids in their classes.

REINHARDT: If you'd like the transcript of the complete four part series, send us two dollars, and we'll send it to you.

MERROW: The cassettes are available, too, for ten dollars.

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MERROW: Ask for our schedule and list of past programs too. That's free.

REINHARDT: And send us the results of your mirror test, if you dare.

MERROW: The transcript is two dollars; the cassettes, ten dollars.

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REINHARDT: OPTIONS IN EDUCATION is written and produced by John Merrow. The Associate Producer is Natalie Igiltz. Charles White is the Assistant Producer. Technical assistance for this program by Andy Rosenberg.

For OPTIONS IN EDUCATION, I'm Barbara Reinhardt,

MERROW: I'm John Merrow.

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Program No. 145: "LEARNING DISABILITIES"
PART II

TABLE OF CONTENTS

	PAGE
INTRODUCTION	1
AVOIDING TOO LOOSE A DEFINITION OF "LEARNING DISABLED" Dr. Sylvia Richardson of the University of Cincinnati, and president of the Association for Children with Learning Disabilities	
TESTING AND TREATMENT OF THE LD CHILD	2-3
AN EXAMPLE OF A GOOD LEARNING DISABLITIES PROGRAM Sixth Grader from the Wadawitz Elementary School in Racine, Washington	3-4
A TEACHER DESCRIBES THE PROCESS OF IDENTIFYING AN LD STUDENT Greg Ripburger, a LD teacher from the Wadawtiz Elementary School in Racine, Washington	4-7
VARIOUS TEACHING TECHNIQUES FOR THE LEARNING DISABLED Greg Ripburger, a LD teacher from the Wadawitz Elementary School in Racine, Washington, and Students	7-9
TECHNOLOGY INNOVATIONS IN LD INSTRUCTION Harry Wayne, inventor of the Talking Pen	9-10
THE NEED FOR MORE AND BETTER TEACHERS Dr. Marianne Frostig of the Frostig Center in Los Angeles, California	10
AN LD STUDENT DESCRIBES HIS DISABILITY	10-11

CHILD: What will be the grocer's -- will be the grocer's gain on 47 bushels of peaches if he buys them -- he buys them all for $95.00 and sells them for $2.42 a bushel?

MERROW: Read that number again. How much a bushel?

CHILD: Two dollars and forty-six cents a bushel.

REINHARDT: That sixth grader may sound slow, maybe slightly retarded. But he's not.

MERROW: His problem is what's called a learning disability.

REINHARDT: And the treatment? Well, a lot of individual attention, for one thing, ideally from a well trained teacher in a well equipped and reasonably small, quiet classroom.

MERROW: That's what we're looking for on OPTIONS IN EDUCATION: the ideal way to teach a learning disabled student.

REINHARDT: I'm Barbara Reinhardt.

MERROW: I'm John Merrow. We continue our series with still another definition of learning disabled, which may be the least understood of all handicaps.

REINHARDT: In fact, the definition you use determines the number of learning disabled kids. One million is the federal government's number. That's how many learning disabled children it's helping this year with money for treatment. But, then, there may be more than one million, again depending on your definition.

MERROW: Do you want a strict definition or a loose one? Do you want a medical one or an educational one?

AVOIDING TOO LOOSE A DEFINITION OF "LEARNING DISABLED"

REINHARDT: Dr. Sylvia Richardson is an educator and a medical doctor. She believes that a loose definition lowers the fences, so to speak, and results in too many kids being labelled learning disabled.....

MERROW: When they may be just slow students, or lazy ones.

RICHARDSON: It's very simple. If you come to my office with a cough and I lay on the stethoscope and get some chest films, I can diagnose pneumonia. I know how to treat it, and I can cure you. And it's very straightforward, very uncomplicated. And if I tell any other physician in the world that John has pneumonia, they'll know exactly what I mean. They may ask me "Is it bilateral, or unilateral, or which side?," you know. But they'll know what I'm talking about. Whereas if you use the term minimal brain dysfunction or learning disability or dyslexia, they want to know what do you mean by that; what are the child's symptoms; learning disability characterized by what? Does he have problems in reading? Does he have problems in arithmetic? Does he have problems in spelling? Does he have problems with writing? These are all different kinds of learning disabilities.

If a child comes in with spasticity, tight muscles and difficulty with gait, and so on, we can examine the child and say "This child is neurologically impaired, damaged"; and this, let's say, is spastic cerebral palsy." Okay. We can make that diagnosis. Then we look for possible cause.

We may or may not find it. Now in some cases, we get a history that tell us that this child was anoxic at the time of birth and barely survived. We can make the assumption, then, that there was some perinatal event that could have created the problem. Really, that's not terribly important, because what's important is that here you have a child with a physical problem: what are you going to do about it? And so you call in for the help.

REINHARDT: Dr. Sylvia Richardson of the University of Cincinnati. She's also president of the Association for Children With Learning Disabilities.

MERROW: As a physician, she wants hard evidence of the causes of the problems. Parents, on the other hand, know there's a problem by looking at their kids.

REINHARDT: So do teachers. And both parents and teachers want help.

MERROW: As Dr. Richardson said, there's a lot of theory and there's also a lot of research going on. Maybe in a few years we'll know more about how the brain works and doesn't work.

* * *

TESTING AND TREATMENT OF THE LD CHILD

REINHARDT: Treatment of learning disabled children poses a problem. First, you have to decide whether to attack the problem itself or to help the child compensate for the problem; that is, strengthen other abilities.

MERROW: Say the child often spells words backwards or in a jumble. Should you work on the basic principles of spelling in close tutoring....

REINHARDT: Or have the child memorize a list of the most common words and have him carry a pocket dictionary.

MERROW: Or look for the neurological causes and hope to correct the problem medically.

REINHARDT: Today compensating is the usual solution in school, perhaps because the learning disabilities field is new. Not enough is known about cause and treatment.

MERROW: Because not enough is known, there're problems everywhere, beginning with identification. That starts either at home or in the early grades when parent or teachers realize that a normally bright child is doing poorly in one field.

REINHARDT: Usually reading, though sometimes math.

MERROW: At this point, the child is tested, or should be, in a clinic by a special education teacher.

REINHARDT: Then maybe a battery of tests, like the Illinois test of psycholinguistic abilities, the Frostig developmental test of visual perception, the Graham-Kendall memory-for-designs' test, and so forth. You get the picture: a lot of tests.

MERROW: Once diagnosed as learning disabled, the child gets special help, an individualized plan designed to correct the special problems. That's required by law.

REINHARDT: But what if the tests show the child is normal?

MERROW: Then we're back to square one, relying on common sense.

REINHARDT: First-rate clinics with adequate tests and well trained tea-

chers don't exist in many places.

AN EXAMPLE OF A GOOD LEARNING DISABILITIES PROGRAM

MERROW: We're going to take you to one school that seems to come pretty close to the ideal with its program for grades 4 to 6. That's the Wadawitz Elementary School in Racine, Wisconsin.

REINHARDT: Twenty-two kids have been identified as learning disabled out of 520 in all. That's two percent, just about the national average.

MERROW: I asked one 6th grader for a tour of Greg Ripburger's classroom. Ripburger is the learning disabilities teacher, and the boy goes there every day for one class period for help in math.

YOUNGSTER: Mr. Ripourger, he collects all these plants. So he grows all his plants over there.

MERROW: Uh-huh. Now I also see what looks like a gingerbread house. What's going on?

YOUNGSTER: We're having a winter decoration contest.

MERROW: Have you gotten to help build the house yet?

YOUNGSTER: No.

MERROW: When do you -- when do you do your construction work?

YOUNGSTER: Tomorrow.

MERROW: Okay. Well, show me the stuff you work with in math.

YOUNGSTER: I work with this learner's book.

MERROW: Uh-huh. Sit down. Okay.

YOUNGSTER: And then sometimes he gives us homework in here, which we would do story problems.

MERROW: All right, what's a story problem?

YOUNGSTER: It's....

MERROW: Read me one. Find me one.

YOUNGSTER: Like, "What will -- will be the grocer's gain on 47 bushels of peaches if he buys them for -- he buys them all for $95.00, what sells...."

MERROW: "And sells."

YOUNGSTER: "And sells them for $2.42 cents a bushel?"

MERROW: Read that number again. How much?

YOUNGSTER: "Two dollars and forty-six cents a bushel.

MERROW: All right, let's do that one. How would you do it? It's an interesting problem you've got. What do you have to figure out?

YOUNGSTER: You have to figure out how much he -- how much he buys with $95.00 and for the $2.46.

MERROW: Now, wait a minute. That's not quite correct. The question is

What will be the grocer's gain?" What does that mean, "gain?"

YOUNGSTER: You get more of.

MERROW: Okay, right. Sure. Profit would be another way of saying that. And how many bushels is he buying?

YOUNGSTER: He's buying 47.

MERROW: Okay. And how many is he going to sell?

YOUNGSTER: He's going to sell all of them.

MERROW: Which is how many?

YOUNGSTER: Forty-seven.

MERROW: Forty-seven. How much did he pay for all the bushels?

YOUNGSTER: For $95.00.

MERROW: Ninety-five bucks, right. Okay. How much is that per bushel? How will you figure it out?

YOUNGSTER: You'd -- you divide it up.

MERROW: Okay, let's do that. So, can we do it on the piece of paper?

YOUNGSTER: Uh-huh.

MERROW: All right. Forty-seven; and the other number's 95.

A TEACHER DESCRIBES THE PROCESS OF IDENTIFYING AN LD STUDENT

RIPBURGER: The very disabled kid is different from a slow learner in that the slow learner has a lower general intelligence. Generally, slow learners are slow in everything, also. The slow learner in the regular ed classroom will be slow in math, language, reading, everything; he'll be just a little slow, where I've learned disabled kids function very well in perhaps a social studies class, but it comes to math class and the kid's "A" in social studies, "F" in math.

MERROW: How about a kid who is terrific verbally; that is, you know, can really go on and talk and express himself or herself very well, but can't handle writing. Is that likely to be a learning disabled kid?

RIPBURGER: That's probably a classic type of example, if they're able to converse, do well on lecture type of things. If the teacher would stand up there and talk about what they're learning, fine. But as soon as the teacher starts writing things on the board that they have to copy, they're not able to do it. They cannot get the forms down from the board to their paper accurately. We see this in my area of math. The kids cannot copy the problems out of the book. I have to do it. Once they get them on the paper, I can teach them to do it. But their first problem is they can't get it accurately. Thirty-seven becomes 73 by the time it gets to their paper.

MERROW: Why does that happen?

RIPBURGER: As far as we know, they have 20/20 vision. The acuity is there. It's how they perceive what they're looking at, and it's that interaction between seeing it, recording it in their brain and the motor output, that the circuits are jumbled. Reading students are a good example. They're reading along, and there's a five word sentence. They read the first two, and then they read the last word, and then come back and hit the third and

fourth word; but maybe it was fourth and third, in that order. So they have -- their eyes are not trained to move in a constant pattern.

MERROW: Well, now, let's correct both those problems, the 37 becoming the 73. You said, well, there's something medical in there, and that's not your field. So you don't try to correct the medical problem. You try what?

RIPBURGER: Well, we call it compensation: how are we going to compensate for this kid so that he can record this accurately.

* * *

RIPBURGER: Are you done?

YOUNGSTER: Yeah.

RIPBURGER: How many hundreds do you have, Judith?

YOUNGSTER: Three.

RIPBURGER: How many tens do you have?

YOUNGSTER: Two.

RIPBURGER: Good. And how many ones do you have?

YOUNGSTER: Six.

RIPBURGER: Six. If we have three 100s, we say that's -- what? If we have three 100s stacked up. You say that's the number....?

YOUNGSTER: Three.

RIPBURGER: ...three in that column. So it's called three hundred. Do we say three hundred, two tens?

YOUNGSTER: No.

RIPBURGER: Well, what do we say? Three hundred....

YOUNGSTER: Twenty-six.

RIPBURGER: Twenty-six, because there's two tens and six....?

YOUNGSTER: Ones.

RIPBURGER: Ones. What's that last column there?

YOUNGSTER: Thousands.

RIPBURGER: Thousands. Put "2" up there. Is this going to be the same color or a different color?

YOUNGSTER: A different color.

RIPBURGER: So blue stands for?

YOUNGSTER: Thousands.

RIPBURGER: How would you read this as a number?

YOUNGSTER: Two thousand two hundred twenty-six.

RIPBURGER: Twenty....?

YOUNGSTER: Twenty-two.

RIPBURGER: And there's all "2's" in each column?

YOUNGSTER: Yeah.

RIPBURGER: But they're all worth something....?

YOUNGSTER: Different.

RIPBURGER: Different. Very good. You think we're done for today on that?

YOUNGSTER: Yes.

RIPBURGER: Okay, we'll stop there. Would you put this away?

We find that with learning disabled kids, they're often very distracted. The movement way over here they catch where the other kid is working along. Also on a page of, say, a regular math text, you've got hundreds of numbers on that page, and it's hard for him to isolate that one problem that he needs, you see. I've had kids write the top number to this problem and the bottom number to a problem four spaces away.

MERROW: So it would help to have a page with fewer numbers on it.

RIPBURGER: That's right. If I want to teach them addition and it's on page 150 in a regular math book, I'll just take two problems from that page and put it on a great big piece of paper with just those two problems, so that he can -- that's a compensation. So then I can teach him addition, because I'm not teaching him recording, you see.

MERROW: Let's solve the reading problem, the kid who's skipping lines or skipping words, or reading the first two words, then the fifth, then the third, and so on.

RIPBURGER: Okay. There're different ways that different teachers attack. I generally have been into eye training type of exercises, as you might call them, or almost physical type exercises. We start in the gross modality, and that would be following a flashlight on a darkened wall and moving that flashlight back and forth as your eyes would move. And we're training the eyes to move fluidly.

From there, I would then move to somewhat a smaller area. In other words, large letters printed on a page, or arrows drawn on a page, and have him follow that with his eyes. Or, I've done this before: on the wall -- draw my "O's" on the walls and make him with the flashlight almost -- I had a miner's helmet at one time. I had it taped on here, so that he could actually move his head in that fashion. From there you go to the smaller modality, big letters printed on a page, and he tracks across them. The kids I'm working with, of course, 4th through 6th grade, know their letters. So what I'll have them do is say the letters as they go across. And then I can tell. If he says H-E and it was really E-H, I can tell that, hey, he's jumped there; his eyes fixated or he jumped, or he's not fluid at that point. Then you can make generalizations too -- if he skips two lines, you know that right away -- rather than in the reading situation where he may not even know the words. Then from there I go to smaller and smaller print, until I finally get down to regular sized print in a book. And I have that kid and his eyes moving fluently and accurately down to the next line. Then you can start to teach him reading.

MERROW: You teach them to keep the finger on the line, and all that sort of thing?

RIPBURGER: That helps. I made little window boxes. He moves the little

window box around. Fingers, anything he needs for compensation.

MERROW: Now you've been talking. I'd like to know. I've been distracted by a number of things as you were talking. I listened to you. Well, I noticed there's a globe behind you, over your left shoulder there, and I noticed which continent is showing, and I noticed some keys on the table. And I also noticed the paint lines on the wall here, where you have this awful green; there're two different shades. Now all of those things distracted me. Am I learning disabled?

RIPBURGER: No. I think it can be safely said that in every area, every person is learning disabled, to some degree.

MERROW: That makes it meaningless.

RIPBURGER: Unless the degree is so much that it inhibits your functioning in the regular society or in the regular classroom. At that point, then it becomes -- it gets to the point of severity where it must be remediated. Everybody had a favorite subject and a subject they did the worst in in school. That's simply because learning patterns are all different for every person. But because you got "C's" and you got "A's" in the rest doesn't mean that you are not fitting into society. But when you're getting "As" in social studies and "Fs" in math and you're getting so frustrated, and it's because of a problem in one of the modalities in which you learn, that can be remediated.

MERROW: But the fact that I was distracted, noticed these other things in the environment: that's normal.

RIPBURGER: That's normal, and it did not take your complete attention away from me. But it's the kid that looks over, sees the globe and actually gets out of his seat and goes over there and touches it and spins it. Now that's a severe enough problem, where the other kid might be looking out the window. That can be handled in a regular classroom. But if that kid gets up, "Sit down. What is she doing?," you know. Then is when we have to do something about it. And that impairs his learning.

VARIOUS TEACHING TECHNIQUES FOR THE LEARNING DISABLED

RIPBURGER: Julie, show me what time school starts.

JULIE: 8:30.

RIPBURGER: 8:30. Okay. Show me what time we eat lunch. I know I know that time. That's a favorite time.

JULIE: 11:30.

RIPBURGER: 11:30. How long is it from the time we start school until we get to eat lunch?

JULIE: Two hours.

RIPBURGER: Okay. I don't know, so I'm going to check. What would be a good way of checking? Moving the clock? Could we do it that way, moving our own clock?

JULIE: Yes.

RIPBURGER: Okay. Would you move it an hour for me? Okay, we've got one hour, right?

JULIE: Uh-huh.

RIPBURGER: Is it lunchtime yet?

JULIE: No.

RIPBURGER: Darn it, I like lunches. How many hours have you got now?

JULIE: Two.

RIPBURGER: Two. Is it lunchtime?

JULIE: No.

RIPBURGER: No. Is it lunchtime now?

JULIE: Yes.

RIPBURGER: What time is it?

JULIE: 11:30.

RIPBURGER: And that is....?

JULIE: Three hours.

RIPBURGER: Okay, now I've got a hard one for you. What time does school get out? I know you don't like school to get out every day.

JULIE: 3:00.

RIPBURGER: Three o'clock every day. All right. Let's move it back. I really want....

MERROW: Okay, that's a set of cards. What are they?

JULIE: They're multiplication cards.

MERROW: Okay, what's going to happen? It says 3 times 1, 3 times.... Oh I see. Okay. All right, here, I think I get it. You mean, I use this card, and it has the problem, 3 times 3. And we ask -- we see if you know the answer, and then the machine tells the answer?

JULIE: Yes.

MERROW: Okay. What's the answer? Read this problem.

JULIE: Three times 3 is 9.

PLAYBACK: Three times 3 is 9.

MERROW: All right. Let me pick one from the middle here. Or, let's try all of them.

JULIE: Three times 4 is 12.

PLAYBACK: Three times 4 is 12.

MERROW: So you can do it by yourself then. Let's try again.

JULIE: Three times 8 is 24.

MERROW: How come we didn't get an answer?

JULIE: I don't know.

MERROW: Let's try another one. Try another one.

JULIE: Three times 6 is 18.

MERROW: And then I put the card in the machine....

PLAYBACK: Eighteen.

MERROW: And it tells you the answer, so you know whether you got it right or not. That's pretty neat.

A sixth grader at Wadawitz Elementary School in Racine, Wisconsin. Greg Ripburger is one of two special education teachers there.

REINHARDT: There are 22 LD kids in all at Wadawitz, grades 4 through 6. Any learning disabled children in the earlier grades go to a different elementary school.

MERROW: Two special teachers for the handicapped, each with a private classroom. That's unusual.

TECHNOLOGICAL INNOVATIONS IN LD INSTRUCTION

REINHARDT: You heard the students at Wadawitz working with a few learning devices: a teaching machine, an abacus, a clock with big, easily movable hands. John found a number of machines and psychological toys on display at a learning disabilities conference in Kansas City.

MERROW: I'm at one of the exhibits here at the learning disabilities convention. There're lots of exhibits around -- textbooks, toys kids can play with. This one sounds as if it's a record exhibit or something. You can hear that music in the background. But in fact, I'm creating that music, or I'm making that music play by what I'm doing with my hand. I'm writing with what's called a talking pen. I'm following a black line, and as long as I stay on the black line, you'll hear that music. As soon as I get off the line.... [Buzzing.] This is a talking pen. Now I'm back on the line, and I'm learning -- in this case, I'm learning to make a circle. Some kids have trouble following the lines, muscular difficulties, neurological problems. They may need something like this to help them learn muscular control. This way the cue, the auditory cue tells me that I'm not doing what I'm supposed to be doing, or, in this case, I'm getting the positive reinforcement; I'm doing what I'm supposed to be doing. I can hear that music. And again, as soon as I get off.... [buzzing]. I have a nasty little reminder to get back on the line. The inventor of the talking pen is Harry Wayne, and he's standing right here. So maybe I can talk to him.

Who uses this?

WAYNE: Well, it's being used now all over the country. It's being used in the primary grades. That would be working with children who have learning problems. It's being used in....

MERROW: What kind of learning problems?

WAYNE: Okay. We're referring to children who have problems -- whose motor development skills are lacking. Their handwriting is usually poor. Their eye-hand coordination is usually poor. We've suddenly become aware of these children existing. Sometimes -- as a matter of fact, at times some of them were even classified as retarded, to an extent. But it was really the fact that they have poor developmental skills. And now we're recognizing them and we are working with these children. And now it is required, by law, that every public school take these children in and work with them in the public grades. And this is why the sudden interest, of course. There's a lot of funding for that purpose.

RECORDING: Get back on the line, you dummy, dummy. Dummy, get back on the line. Dummy, dummy, get back on the line.

MERROW: Okay.

WAYNE: You wouldn't, of course, use "dummy." We're just trying to be

dramatic here to illustrate that it can say "Johnny, get back on the line," or it could be reversed: "Johnny, you're doing very well as long as you hear my voice."

MERROW: Harry Wayne of Skokie, Illinois, the inventor of the talking pen.

RECORDING: Get back on the line. Dummy, get back....

MERROW: And you can have the voice cue also. Here it goes. Now I'm doing what I was supposed to be doing. But as soon as I stop....

RECORDING: Back on the line. Dummy, Dummy, Dummy, get back on the line. Dummy, dummy, get back on the line. Back on the line.

THE NEED FOR MORE AND BETTER TEACHERS

REINHARDT: But most experts in the field do not believe that talking pens or computer assisted teaching, or any mechanical device, can ever substitute for individual attention from trained teachers.

MERROW: Dr. Marianne Frostig, one of the pioneers in the field of learning disabilities, says more and better teachers are needed, not more machines.

FROSTIG: I do not believe that you can do your best with these children when you use any mechanical device like a computer to develop their program. One has to have a clinical approach. One has to have an idividualized approach, in which one considers the feelings of the children, the way they work, the way -- their communicative style, they call it; not just what they can do and what they can't do. When we only know in what they failed and what they can do and make a program on this basis, we don't know how they learn.

MERROW: Public school may not be able to do that kind of clinical, very close attention.

FROSTIG: I think that, unfortunately, the law which we have now, the newest law, in intent, excellent. We should be very proud of America that we have a nation in which such laws are created, which, by the way, are now copied, or at least inspected by I think practically -- nearly all nations in the world. But we should also realize that that law will not work if we do not have the means to put it into effect. I think it is absolutely unjust to require people who are not specially trained and who are without any additional necessary help to do this kind of a job.

MERROW: Dr. Marianne Frostig of the Frostig Center in Los Angeles, California.

AN LD STUDENT DESCRIBES HIS DISABILITY

STUDENT: When I read out loud, I can't get it out, out fast, you know. Like I will read inside, you know. And like, if I was reading -- reading, my words would get wrong. Like I'll be saying it wrong and, like, it'd come out all different.

MERROW: But inside your head, it's coming out right.

STUDENT: Yeah.

MERROW: Let's experiment. Let's get something for you to read here. Let's turn the page to a new page. How about -- well, you can just read this. Okay?

STUDENT: Have you ever tried to pursue your....

MERROW: That's persuade.

STUDENT: ...persuade your part -- parts -- parents to allow you to do something of which they do not approve.

MERROW: Now do you understand what that says?

STUDENT: Yeah, in a way.

REINHARDT: Next on OPTIONS IN EDUCATION, teachers for the learning disabled, how to train them and how to help regular classroom teachers spot kids who show signs of learning disabilities.

MERROW: If you want the complete transcript of this four-part series on learning disabilities, send us two dollars. We'll send you the transcript and a list of books and articles about LD.

REINHARDT: The two cassettes are also available for ten dollars. Our address: National Public Radio -- Education, Washington, D. C., 20036.

MERROW: When you write, ask for a copy of our schedule and a list of past OPTIONS IN EDUCATION programs. That's free.

REINHARDT: So two dollars for the transcript; ten dollars for the cassettes. And the program guide is free.

MERROW: And tell us the call letters of your NPR station.

REINHARDT: Our address again: National Public Radio -- Education, Washington, D. C., 20036.

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REINHARDT: OPTIONS IN EDUCATION is written and produced by John Merrow. Natalie Iglitz is the Associate Producer. The Assistant Producer is Charles White, with technical assistance by Andy Rosenberg. For OPTIONS IN EDUCATION, I'm Barbara Reinhardt.

MERROW: I'm John Merrow. And this is NPR, National Public Radio.

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Program No. 146: "LEARNING DISABILITIES"
PART III

TABLE OF CONTENTS

	PAGE
INTRODUCTION Dr. Marianne Frostig of the Frostig Center in California	1
CONFUSION OVER THE DEFINITION OF "LEARNING DISABILITY" Dr. Samuel Kirk of the University of Arizona	1-2
THE DANGER OF PERVERTING THE DEFINITION OF LEARNING DISABLED Dr. Samuel Kirk of the University of Arizona	2
AN EXAMPLE OF A LEARNING DISABILITY	2-4
THE PROCESS OF IDENTIFYING THE LEARNING DISABLED STUDENT Marge Larsen at Gilmore Junior High School in Racine, Wisconsin	4-5
TRAINING TEACHERS TO BE SENSITIVE TO LD STUDENTS Cynthia Field and Kathy Lowe, two teachers from Augusta, Georgia	5-7
INSTITUTIONAL REINFORCEMENT OF TEACHERS OF LD STUDENTS Dr. James Gallagher of the Frank Porter Graham Child Development Center in North Carolina	7
THE CRITICAL ROLE OF THE TEACHER Lois Mayes, teacher from Missouri	7-8
THE DICHOTOMY BETWEEN MEDICAL AND EDUCATIONAL APPROACHES Dr. Samuel Kirk of the University of Arizona	8-9
STUDENT, TEACHER ASSESS A LEARNING DISABILITY IN MATH	9-10

FROSTIG: You know, when you have a child with learning disability, that is unbelievably disturbing, because you know that kid could and it can't. You know this kid should, and it doesn't. You know, there is a discrepancy which the parent does not understand.

REINHARDT: Dr. Marianne Frostig is an expert in the field of learning disabilities.

MERROW: But that's a field full of mysteries. After all, a learning disability is not like a broken leg. There's no cast, no limp, no obvious proof that anything's wrong.

REINHARDT: So learning disabled kids are often mislabelled slow learners, or just plain dumb.

YOUNGSTER: Doctor, actor, work, warm.

TEACHER: Wait a minute. This one again.

YOUNGSTER: Worm.

TEACHER: Worm.

YOUNGSTER: Word.

MERROW: I'm John Merrow.

REINHARDT: I'm Barbara Reinhardt. And on OPTIONS IN EDUCATION, we're continuing our series on learning disabilities and on the one million kids who get special help for those disabilities in the public schools.

CONFUSION OVER THE DEFINITION OF "LEARNING DISABILITY"

MERROW: Most doctors define learning disabilities medically. They talk about neurological deficiencies.

REINHARDT: But educators reject terms like dyslexia and aphasia and prefer to define learning disabilities in the language of the classroom teacher.

KIRK: It's a term that is kind of an umbrella term for many kinds of disabilities -- reading, writing, spelling, arithmetic, visual motor activity, language disorders, and so forth. That's why it's rather difficult to define.

REINHARDT: Dr. Samuel Kirk of the University of Arizona.

KIRK: Learning disability has three characteristics. First, we consider a child as having a learning disability if there's a discrepancy or a disparity between his ability and his achievement. A child can understand language very well and may not be able to talk. That's a discrepancy between what goes in and what goes out.

The other criterion is that this retardation in reading or arithmetic or spelling is not the result of some of the handicaps that we know, like deafness. If a child is deaf, he's going to have difficulty in school. Now if we can explain this retardation by deafness, blindness, mental retardation or lack of opportunity to learn....

MERROW: Or even emotional disturbance.

KIRK: Or even emotional disturbance, then that child is not learning

disabled. And that's the confusion.

The third criterion is that this child needs special education. Now by special education, I mean that kind of education which is over and above what we give the ordinary child, something different, something extraordinary, in addition to the regular.

MERROW: I'll bet there're a lot of people out there listening, and I think I'd number myself among them, who are a little bit skeptical about the whole thing. I come from a family of six kids. Suppose one of those kids, probably me, was a little slower than the others, wasn't doing as well as Jimmy and Robbie, and so on, had done. Now, it's kind of convenient. You can say, well, okay, John here is learning disabled. And it makes me -- it gives a little respectability; it upholds my parents' stature in the community because, you know, they don't have to say that I'm just plain dumb.

KIRK: I think that's correct. I think you have the picture very well. That's one of the difficulties with learning disabilities.

REINHARDT: Dr. Samuel Kirk of the University of Arizona. He coined the phrase "learning disability."

MERROW: But he's among the first to admit that it can become a white, middle class disease.

THE DANGER OF PERVERTING THE DEFINITION OF LEARNING DISABLED

KIRK: I'll give you a case. A man tapped at my door once with his wife at 8:00 in the evening and said we hear you're a specialist in learning disabilities. We have a learning disabled child and we'd like some advice. So I invited them in. They had the school folders with them. And I looked at the folders and I found this boy was a junior in high school. He was getting C's and B's and D's in his school work, and he was reading, according to the test, about 10th, 11th grade, and doing mathematics at that level. And I turned to the parents and I said "Why are you calling this boy a learning disabled child?" They said to me "We have put in an application to an elite college in the East and they turned him down because his grades aren't good enough. And we thought that if we caught him now at the junior level and worked with him, we can correct his learning disability so he will get A's and get into the junior college -- into the elite college.

That's part of an answer to your question, that some people feel that their children should be on top of the class all the time. Now everybody can't get A's, and everybody can't be on the top of the class. Somebody's got to have to be in the middle or even at the bottom in every class in some area. And so we have that phenomena operating as learning disabilities.

REINHARDT: Dr. Samuel Kirk of the University of Arizona.

AN EXAMPLE OF A LEARNING DISABILITY

MERROW: Let's talk about you. Why are you in this special class?

STUDENT: Well, 'cause I have difficult[y] reading. And when I read something, I can't remember it.

MERROW: Maybe you'll read for me. How about reading? Let's turn to -- ah, let's just turn to this paragraph right here.

STUDENT: Some words are spelling except like another words. You must know how to 'pranoose'....

MERROW: Pronounce.

STUDENT: Pronounce the words.

MERROW: What's that mean, "pronounce?"

STUDENT: Like you got a speech, and you pronounce it. "...The words when they are used in a different ways. These words are called hom -- 'homographs.' In the blank, write the key words like shows the correct pronounce -- pronounce -- 'pronountion.'"

MERROW: Pronunciation.

STUDENT: "...Pronunciation of the particular...."

MERROW: That's italicized. Do you know what that means, "italicized?"

STUDENT: No. "...Words in each sentence. The first one is done for you."

MERROW: Now what does all that mean? What are the directions?

STUDENT: Well, that means, like, they want you to pronounce the word and fill in the blank.

MERROW: Well, they're talking about a special kind of word, though. They call them homographs. What are they? Do you remember?

STUDENT: Words that -- with vowels; I mean, certain kind of vowels.

MERROW: Now you just read that, but you don't remember what they are. Or did you understand it when you read it in the first place?

STUDENT: Well, I can understand when I first read it. But as soon as I get done, I just....

MERROW: Well, let's go back and figure out what that is. Here's one right here.

STUDENT: Wound.

MERROW: Yeah. How else could you pronounce that?

STUDENT: Wind.

MERROW: If you got hurt -- if you got hurt, what would you call it?

STUDENT: Wound.

MERROW: Well, how about wound?

STUDENT: Wound.

MERROW: Have you ever heard of a wound? If you got shot, it might be a flesh wound.

STUDENT: Yeah.

MERROW: And the other word is wound. What's that mean?

STUDENT: Like you wound something. Like you have a piece of yarn and you wound it up.

MERROW: Sure, that's exactly right. So you have to know when you see that? How do you figure out which one it is if you see the word W-O-U-N-D?

STUDENT: W-O-N-O.

MERROW: If you see the word "W-O-U-N-D," how do you know whether it's wound or "wound?"

STUDENT: See 'em both, and then see which one.

MERROW: Well, they look alike. You can't tell by looking at it. How can you tell?

STUDENT: Just say it and see which ones goes with it.

MERROW: All right, let's do this one. "The _____ on Tom's leg healed nicely?" Should that be the "wound" on Tom's leg or the wound on Tom's leg?

STUDENT: The wound.

MERROW: How do you know?

STUDENT: Because it's talking about his leg, something on his leg. So it would be a wound, because he wouldn't "wound" something around it.

MERROW: How about this one? "Mrs. Gary wound her yarn into a ball," or "Mrs. Gary "wound" her yarn into a ball?"

STUDENT: "Wound."

MERROW: Why?

STUDENT: Because the yarn don't get wounds.

MERROW: Thanks.

THE PROCESS OF IDENTIFYING THE LEARNING DISABLED STUDENT

LARSEN: My name is Marge Larsen. I'm a learning disabilities teacher at Gilmore Junior High.

MERROW: Now why is it -- why is it that he's labelled as a learning disabled child?

LARSEN: He has problems with understanding the information that is coming in. This is interfering with his reading, his spelling ability, and it interferes with math, or in many different areas of his school work.

MERROW: He's just a lousy reader.

LARSEN: He has a normal intelligence. But that's right. He has so many different interferences that are coming in that interfere with his being able to read.

MERROW: Now help me understand that. What do you mean "has so many different interferences?" I have this picture of, you know, I'm driving down the road and I have trouble watching the road because there're all kinds of other flashing lights distracting me.

LARSEN: That's right. Richard has a lot of distractions. Ever since he probably started to read, he was seeing letters backwards. He would read "was" as "saw." He'd see the "b" as a "d." Richard has come as far as not having these reversals. He's learned to compensate for them. But....

MERROW: You haven't used the term dyslexic.

LARSEN: No, I try to stay away from terms, in the fact that there're so many different types of definitions that have come out. I've also stayed away from minimal brain damage, in fact that these kids aren't all given an

electroencephalogram, in which case they don't know. Many LD students may have a slight cut in their brain that has been named as a possible cause of learning disabilities. But all we know as a learning disabilities teacher is that there are interferences that an LD student gets that's preventing him from reading as a normal student does. He also has a poor memory. This is another characteristic of an LD student. So he has to work twice as hard on drill and memorizing sight words, memorizing the sounds that short vowels make.

MERROW: As an LD teacher then, you drill him on these things that he has to work twice as hard to get.

LARSEN: That's right.

MERROW: So, basically, the cure, if you will, is more close attention.

LARSEN: Yes, that's why there are, you know, from six to eight students in a regular classroom compared to thirty, where the student would be totally left out, and he would have to be on his own to compensate for his own distractions that are happening to him.

MERROW: You kind of minimize the distractions.

LARSEN: Right. Many students even go out of the room to ask if they can work in a study corral where they're totally surrounded by a wall, so that visual distractions are cut out.

MERROW: When is the best time to intervene, to start working with LD kids?

LARSEN: It's best to identify them in the kindergarten. If a kindergarten teacher can pick up some learning disability characteristics, like clumsiness or not being able to match a puzzle into a certain piece, if she starts perceiving certain characteristics about a student -- hyperactivity or hypoactivity are characteristics of learning disabled -- if there are a number of characteristics, if she says "I would like this student tested," a school psychologist can test at that time, and if he is found to be learning disabled, the sooner the better in starting to remediate, to help him compensate for some of the things that are interfering with his learning.

MERROW: Do these kids know they're different? Is there a stigma?

LARSEN: There is a stigma. Being in the junior high, having them go into some of the mainstream classes eliminates some of that. I think you see more of it at the elementary level.

REINHARDT: Marge Larsen is a teacher at Gilmore Junior High School in Racine, Wisconsin. The student you heard, Richard, is in eighth grade at Gilmore.

MERROW: Marge Larsen had some special training. But many, perhaps most classroom teachers cannot recognize learning disabled kids in their classes. That's the biggest problem of all, in the eyes of some professionals in the learning disabilities field.

* * *

TRAINING TEACHERS TO BE SENSITIVE TO LD STUDENTS

MERROW: We came across two teachers who spend their time re-training other teachers, trying to make them sensitive to the needs of LD kids.

REINHARDT: Here's one thing they do: give the teachers a list of utterly strange symbols to memorize....

MERROW: In four minutes.

REINHARDT: Then they give a test. During the test, they walk around making distracting noises.

MERROW: Naturally, everyone flunks.

REINHARDT: The idea is to get the teachers to enter the disoriented world of the learning disabled. Cynthia Field and Kathy Lowe explain.

FIELD: We feel that this gives the teachers a feeling of what it's like when we have students, particularly the older students, who open a history or a science textbook that's written on an 8th grade level, 12th grade level. They open it up. They read on a first or second grade level. It could be written in Greek for all the meaning that our students get. And this lets the teachers feel the same feelings that our students do when they say "Read the chapter," you know, "answer the questions."

MERROW: What's your hypothesis, that most teachers don't empathize with kids who are learning disabled?

LOWE: We think that could be one hypothesis. We also feel like it's just that teachers have never been exposed to the feelings of the students, and therefore they don't understand them, because a lot of LD students seem as if they're normal, and we hear, "Well, he can do it; he just -- he won't." And we find that it's just more or less sometimes a lack of exposure and understanding of the problem that causes, you know, that causes the hypothesis you just mentioned.

MERROW: Well, now, you've got a whole bunch of frustrated teachers at the end of this presentation. They all hate you, or they're all frustrated. But are they supposed to change their behavior, Cynthia?

FIELD: Yes. We then go on to make the point that there are some things that they can do. And after we let them know how frustrating it is, we give them some things to do. We give them some very easy, not-time-consuming things they can do, so that the students will be happy in their classroom and experience success, which will, in turn, make the teachers happy, because they won't have these students creating problems in their room.

MERROW: Like what? What easy tasks do you give your teachers whom you are teaching?

FIELD: We suggest to them that they cut a spelling list in half for a poor speller, that they don't make the student copy the whole sentence when it's fill-in-the-blanks; just write the word that goes in the blank. Fold the paper in half so that the student isn't overwhelmed by a whole page of math problems at one time. And suggest that they just do one line at a time. Little things like that. Use highlighters and colored chalk. Make sure that the students understand the directions.

MERROW: Kathy?

LOWE: As far as spelling too, we try to make sure that a student is not asked to spell words he can't read. And I think after going through the reading lesson, this may carry over in the teachers' minds that, if I can't read that word, how on earth can it be easy for me to meaningfully spell the word and memorize it. Also, we try to give them suggestions for a lot of LD students who are very distractable and impulsive. They may be able to do the work that's assigned, but because of attending problems, they can't. So we suggest that they help the student find a place in the room where he's comfortable working, where he doesn't have as many distractions, sometimes using a study corral or getting behind a -- maybe being on a rug and writing on a sheet of paper, or behind, in the back of the classroom, so that they're more

or less away from the other students.

MERROW: These seem so elementary. Don't most teachers know these things?

LOWE: A lot of times we feel like they don't or they would probably be trying these things. And I think part of the problem, too, is that they don't really realize that an LD student -- that they have LD students who are causing the problems. Sometimes they may think they're just behavior problems. And I think that's part of the problem.

MERROW: And they're not just behavior problems. There's no question in your mind that these kids are LD.

LOWE: We feel there's a fine line sometimes between behavior disordered children and learning disabled children. But then you reach the question after several years perhaps, depending on the age of the child, a frustration: what came first, the learning disability or the frustration? So we feel like, basically, no; if these kids are catered to and their needs are met in school that they will not be behavior problems, generally.

MERROW: Cynthia Field and Kathy Lowe, two teachers from Augusta, Georgia.

INSTITUTIONAL REINFORCEMENT OF TEACHERS OF LD STUDENTS

REINHARDT: But teacher training alone isn't enough, according to Dr. James Gallagher.

GALLAGHER: If you walk down the street and you pass a hundred people, one of them is likely to be an elementary or a secondary school teacher. So we're talking about one out of every hundred people in this country. So the chances that not every one of them is an expert on everything is very high. The question is can the school organize its resources to deal with this problem, not whether there's an individual teacher in George Washington School somewhere who is not doing everything that they should do. The question is you shouldn't plan your educational program as though this perfect person is going to be there. You plan it on the basis that there's a normal person that's going to be there who'll make normal mistakes, with their own limited skills and background, and that you have a system, however, that will help to identify the youngsters that need help so you can do something about it.

Too much is put on the individual teacher.

REINHARDT: Dr. James Gallagher of the Frank Porter Graham Child Development Center in North Carolina, talking with Barbara Bernhard.

THE CRITICAL ROLE OF THE TEACHER

MERROW: No matter how sophisticated schools may become in meeting the needs of learning disabled kids, the best help still comes from individual work with a trained teacher.

REINHARDT: That's been true in the field of learning disabilities from its beginning fifteen or so years ago.

MERROW: Lois Hayes was one of the first teachers in Missouri to study learning disabilities. She told me she knew that some of her students had learning problems, but she didn't know exactly what to do about them.

HAYES: There was Gary, for example. He was an extremely hyperactive child, just as hyper as he could be. He tried to write jumping up and down. He sat on his knees; he crawled around under his chair and seemed unable to

complete anything because of his inability to settle down and write. He was an excellent reader. He just loved to read. And he would read for hours at a time, comprehending what he was reading, and was a good reader.

And then there was Hank. He had a very poor idea of the person's parts, let's say, what a person was, where his head was, his arms and his legs. When he drew his man picture, people's features were all over the page. There would be something here and something there and something somewhere else. I'd say "What are they, Hank?" He said, "Well, that's an arm over there, and you can see that's an eye, and this is his leg." But none of them were integrated. I wonder what people look like to a child like that.

And then there was John. And this was a child who had an extreme communication problem, to the point where he was unable as a young child to communicate at all. He had both receptive and expressive language problems. That is, the language did not come in right, and naturally since he couldn't process words, then it was very difficult for him to learn to talk. It took him a long time before he could talk. And then finally when he was able to talk, he didn't understand all of the words that he said, and he didn't understand the syntax and the order of words in a sentence so that they made sense.

MERROW: Now you just described the kids and the things they couldn't do. Did you know why they couldn't do these things?

MAYES: No, I really didn't. I knew that they were placed in that room because they had been tested and that some expert had told me that these children were neurologically impaired.

MERROW: "Neurologically impaired." That's the brain model. I mean there's something wrong basically back in the brain.

MAYES: Yes, that's what they said about these children. These children had been through clinics. They might also have said they were brain damaged. However, we thought that was a very damaging label, and we thought "neurologically impaired" might be more accurate. There was a great deal of argument about that time about the definition of learning disabilities.

MERROW: There still is.

MAYES: Yes. All they do is argue about it. And about brain damage and what relationship there is. But the clinics that sent these children to us felt that there was a physical basis for their problem. I did the best I could with the knowledge I had. And actually, it seemed to work pretty well.

THE DICHOTOMY BETWEEN MEDICAL AND EDUCATIONAL APPROACHES

MERROW: Lois Mayes didn't use medical labels, like dyslexic or aphasic to describe Hank and Gary and John. In fact, a lot of the people in the field reject medical labels. They're not doctors; they're educators, they say, and so they treat the educational problem, the learning problem.

REINHARDT: Samuel Kirk.

KIRK: Now I would prefer that parents come to me and say "My child doesn't talk" instead of telling me he's aphasic or dysphasic. They say to me "This boy hasn't been able to learn to read, and he's been in school for three years." That has more meaning to me than to say he's dyslexic. I have letters from ophthalmologists and from doctors: "I'm sending you a boy who has streptosymboleum." Now I'm sure the doctor doesn't know what streptosymboleum means.

MERROW: I don't.

KIRK: I means twisted symbols. It's a term that was used by Samuel

T. Orton some years ago to mean twisted symbols in the brain, reversals and so forth.

Now it's better for them to tell me that the child can't read and we can't find anything wrong with him physically. And I am for simplicity in diagnosis and referral rather than all of these terms. We want to be profound. And I prefer the more simple words: the child can't spell; he can't talk; he can't read; he seems to be excitable; he can't sit in his chair; he's jumping around; you know, give the behavior of the child, because I can work on the behavior. I can't work on the brain.

REINHARDT: Dr. Samuel Kirk of the University of Arizona.

Remediation can work so that learning disabled children can move out of special clinics into regular classrooms.

STUDENT, TEACHER ASSESS A LEARNING DISABILITY IN MATH

MERROW: Okay, now, you're a 7th grader, right? A seventh grader. And you're in this special class. And you told me your problem was math, and you said your problem was division. And so we just did a problem. I just made up a problem f r you, which was 17 into 1899. And you breezed right through that. And then I gave you another problem, twenty into four million, and you got that. And then I just gave you a hard one, a really hard one, 31 into 6541, and you got that. Each time you did it right. What are you doing in here?

STUDENT: Last year I had LD, and they put me in this math class when I came to Gilmore.

MERROW: What do you mean "you had LD?" What's that mean?

STUDENT: Learning disability.

MERROW: What's that mean?

STUDENT: I don't know.

MERROW: What did you do in your special class last year?

STUDENT: Math. That's all.

MERROW: Maybe you learned so much that you're ready to go back.

STUDENT: Yeah.

MERROW: Do you know your multiplication tables?

STUDENT: Yeah.

MERROW: What's 8 times 9?

STUDENT: Seventy-two.

MERROW: Six times 3?

STUDENT: Eighteen.

MERROW: Seven times two?

STUDENT: Fourteen.

MERROW: Nine times 8?

STUDENT: Eighty-one.

MERROW: Nine times eight?

STUDENT: Seventy-two.

MERROW: Okay.

Now you're her teacher. Tell me about that young girl and why she's here.

TEACHER: Okay. Daphenia is in with me for math because she lacks some of the basic skills, and she lacks these skills because -- again, because of the distractions she had in the elementary levels. Towards the beginning of the year, I found Daphenia was making a lot of careless mistakes; it wasn't actually that she didn't know the process of multiplication or the process of division, but she would be carrying the wrong numbers or bringing down the wrong numbers, not moving her numbers over. So over the summer her memory for doing those certain facts failed her so that she needed some drill in order to catch on to the processes. Right now she's working on Roman numerals, something that she said I know a few of them, from I to XX. But it's only going to take a little review, and she'll get caught up and the skills will come back to her.

MERROW: You have to help me with that, because it seems to me that that would be a perfect example of a kid who didn't learn it when she was little, and because she got special help, special extra attention, has now learned it. It's not learning disabled, though; that's just somebody who missed the first time around and got it the second time around.

TEACHER: It took a lot of second times around in order for her to get it.

MERROW: The complete transcript of this special series on learning disabilities costs two dollars, and it includes a list of books and articles you might want to read.

REINHARDT: The two cassettes cost ten dollars.

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For OPTIONS IN EDUCATION, I'm Barbara Reinhardt.

MERROW: I'm John Merrow.

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Program No. 147

"LEARNING DISABILITIES"
PART IV

TABLE OF CONTENTS

	PAGE
INTRODUCTION	1
A TEACHER TRACES THE EVOLUTION OF A LEARNING DISABILITY	
THE DANGER IN LABELLING POOR STUDENTS "LEARNING DISABLED" Sylvia Richardson, President of the Association for Children with Learning Disabilities	2-3
A LEARNING DISABLED STUDENT READS	3
EMOTIONAL PROBLEMS OF LEARNING DISABLED STUDENTS Dr. Chester Poremba of the Department of Psychology, Children's Hospital, Denver, Colorado	3-4
TESTS FOR THE LEARNING DISABLED Dr. James Gallagher of the Frank Porter Graham Child Development Center in North Carolina	4
CHILDREN LEARN AT DIFFERENT RATES Ellen Stone, a parent and president to the Naperville, Illinois Chapter of the Association for Learning Disabilities	5
AN LD STUDENT'S EARLY YEARS IN SCHOOL Diane Ridenhour, a "LD" college student from Oak Park, Illinois	5-7
LD STUDENT AT A SAN FRANCISCO CLINIC Trillby, a "LD" adult	7-9
TRILLBY'S TEACHER'S METHODS OF TEACHING Gail Venable, a teacher for the learning disabled at San Francisco's State University	9-10

PATRICK: Un, sung; ink, sink; unk, hunk; unk, sunk.

TEACHER: Very nice.

PATRICK: Ih....

TEACHER: Good.

PATRICK: Ah....

TEACHER: Uh-huh.

PATRICK: Eh....

TEACHER: Good.

PATRICK: Aaah....

TEACHER: Good.

REINHARDT: He's learning his letters and their sounds.

MERROW: How old do you think he is? Four? Maybe five?

REINHARDT: Well, he's nine years old. But he's not just a slow reader, and he's not retarded.

MERROW: He's learning disabled.

REINHARDT: This is Barbara Reinhardt.

MERROW: I'm John Merrow for OPTIONS IN EDUCATION. We're continuing our report on kids with learning disabilities.

A TEACHER TRACES THE EVOLUTION OF A LEARNING DISABILITY

TEACHER: Patrick is nine years old. He came here I guess over the summer. He had been in a normal class first and second grade, and then he had to repeat second grade. And the school had decided that he had an emotional problem, that he didn't have a significant learning problem, and that his emotional problems were getting in the way of his learning, and that's what was wrong. And I'm not denying that there might have been emotional problems, and there may still be emotional problems. But there's also a learning problem. When you give him a test, comparing him to other children, his ability to carry out a number of tasks that involve reading, writing and putting reading and writing together and remembering, he really falls behind. He was writing, he was printing the letters of the alphabet, and every time he printed a letter he had to think where to start. And not only that, he didn't print "b." You know, we learn to make it like that. He made it something like this. So there were two separate, completely separate strokes, and he never remembered where to go. No one ever told him, I think, that he had to make letters certain ways. And I also think there're a lot of teachers who teach letters in very separate strokes. And for a kid like Patrick, it turns out to be disastrous.

There's still a residue of this in the way he writes numbers, because there's no, of course, number alphabet. But any way, he....

WISSEL: What is his main disability?

TEACHER: He has a spelling problem. He has a good year, but he has a terrible time remembering what words look like. And so any word that isn't

spelled like it sounds is a disaster for him. And so the way to remediate a problem like that is to teach a child not only to use his ear, but also to learn certain regularities of spelling that supplement the ear, like knowing, for instance, that "chhh" in wrench: he would know to spell that C-H, but to know that the "chhh" in "catch" is spelled T-C-H is a rule that you have to learn.

Now you probably didn't have to learn that rule, and I didn't learn that rule when I was in school, because we remembered easily how words looked and how they sounded. And when we learned to read a word, we also learned to spell it. That seems to be the way most kids are. Normal kids seem to have reading and spelling skills at pretty much the same level. But his reading and spelling are very disparate.

THE DANGER IN LABELLING POOR STUDENTS "LEARNING DISABLED"

MERROW: During that entire conversation with reporter Paula Wissel, Patrick's teacher, Gail Venable, never used medical terms to describe Patrick's problem. She calls it a spelling problem; can't remember what words look like. So that's what she's helping him with.

REINHARDT: That makes it a lot easier to understand just what a learning disability is. In fact, it may make it too easy. Consider the common sense definition. A child with average or above average intelligence who's not performing well in one or maybe two areas. That's a learning disabled child.

MERROW: That rather loose definition leads a lot of parents to think their only kids are learning disabled just because they get a poor grade in English or have difficulties with long division.

REINHARDT: People sometimes become hypochondriacs when they hear about a new disease. Dr. Sylvia Richardson, President of the Association for Children With Learning Disabilities, has seen it happen.

RICHARDSON: It's very possible that it's very common. I had a brain tumor all the way through medical school. My roommate had tuberculosis, you know. We just got the symptoms when we read it. You know, I can't read an article about schizophrenia because I'm convinced I've got it.

We all have many, many symptoms that sound the same way. You have to look for clusters of things, you have to look for special things. I can give you a very nice example of a lot of confusion that exists, and it's something that I have very strong feelings about, the term "hyperactivity." See, that is not a diagnosis, that is not a disease. That is an adjective or it is relative to the person who uses it. Because what is hyperactive to you may not be hyperactive to me at all. And I hate the word in particular, because because I'm Italian.

Now I don't want everybody assuming that if you are hyperactive you're brain damaged and all the rest, because if you came to my house when I was growing up and everybody was together all at the same time, and everybody was talking at the same time and jumping up and down, and the hands are going and everbody's going, you'd say, My God, this is whole brain-injured family.

But by the same token, I could go into an Anglo-Saxon home and and assume they're all dead. All right?

So you know, there are tremendous differences. We have certain expectations for our children. Some mothers expect -- we don't know what to expect when we have children. Say you're a very quit, placid mommy, and you want a little cuddle bunny. And you get a kid with very normal -- at the upper limits of normal -- high intensity, temperamental attributes, a real go-

getter who's going to be the salesperson of the year. Well, that mother is going to react very differently to that particularly baby than she would if she'd found a cuddle bunny.

MERROW: What I deduce from this is that people listening should be careful about drawing conclusions that their kids may be hyperactive or learning disabled. They should tread slowly and softly.

RICHARDSON: Oh yes. In any case, they shouldn't jump to the idea -- you know, one of the things -- you have to weigh many things, I think. I think the parents need to ask themselves a lot of question. The child who has a real learning disability, okay? It doesn't need much questioning in the minds of the parents. They know there's something different.

MERROW: It's not a learning problem.

RICHARDSON: That's right. It's not a learning problem, and it's not something that's happened to the child from outside, it was caused by environment stresses, so on and so forth. If parents aren't sure or if they have questions, I think they should go for help just to get their minds at ease, because we forget, as parents, that our children don't really hear what we say, they hear how we feel. And if as parents we're fearful, worried, the child knows it. We see many children's whose self image has been pounded to death, who have been taken for evaluations here, evaluations there, and they don't know why. All they know -- one little guy told me: I said, why did you come to see me, Robbie? He says, I don't know, but my mom says I got to get my -- my -- I got a hole in my brain. Well his mother didn't tell him that. That's what he interpreted from all the stuff that had been going on. It's dreadful to have to live with. We expect more of our children that are beyond their capacity to perform. We expect things of our children that we didn't do ourselves.

One of the requirements I keep wanting to inflict on my poor patients is every time they bring a child in who is not doing well in school, I would like for the parents to also bring me their own high school report cards.

A LEARNING DISABLED STUDENT READS

REINHARDT: The pressure from parents that Dr. Richardson describes, to push all slow learners into the category "learning disabled," That helps transfer the blame for a kid's academic performance from the parents and from the schools

MERROW: To the kid. So suddenly the cause is inside the child.

CHILD: The pilot kept his plane in the hangar. The doctor gave Carl a shot. I gave a penny to the beggar. That is the worst sandwich in the world. world. The Wizard of Oz. I like mustard on my hotdog.

EMOTIONAL PROBLEMS OF LEARNING DISABLED STUDENTS

REINHARDT: The estimates of the number of learning disabled children vary widely from half a million to ten million.

MERROW: The number is growing. That's for certain.
REINHARDT: Right now the Federal Government is helping pay for special programs for nearly one million kids labelled "learning disabled." That's about two percent of all school-aged kids.

MERROW: They are identified by a combination of a teacher's observation and by special educational tests. Some in the field think that some day soon medical tests will be used, and then the numbers will increase drastically

REINHARDT: Dr. Chester Poremba.

POREMBA: Let me tell you, I think that five years from now we'll be identifying LD by way of the laboratory. In other words, we're going to examine blood and we're going to examine how the kid, or the person processes blood or other, you know, bodily functions. And that's going to be very much in the picture.

MERROW: As opposed to today?

POREMBA: Yes, today, you see, we're kind of hung with all kinds of educational problems. Kids learn in school, you know, that's where they are. That's where they function, that's where they don't function, and they're visible from that standpoint. And it's very interesting that the national definition on learning disabilities is related to grade placement versus age.

MERROW: You're saying five years from now it s going to be much more medical.

POREMBA: I think so. It had better be, because I think unless it is, I think we're on the wrong track.

MERROW: You know, I think people listening to this might be very upset particularly if they have kids. Most of the other people I've talked with, most of the literature I've looked at, estimates LD at a pretty low percentage -- two three, four percent. That was in federal expectation -- legislation where they got two percent level to be eligible for federal money. Now here you come along saying, oh, 20 percent, maybe more. But the drift of your conversation implies to me, or I infer, that you're you're really talking about learning problems, not necessarily for learning disabilities. Do you care about the disabled?

POREMBA: Oh, yes. You know, again, it makes a difference, you know, how you define the problem. That two percent is very interesting. The point I'm trying to make is they'll find, you know, as much disorder as they're funded to find. And this is in learning disabilities or in blindness, or what have you.

REINHARDT: Dr. Chester Poremba of the Department of Psychology, Children's Hospital, Denver, Colorado.

TESTS FOR THE LEARNING DISABLED

REINHARDT: Medical tests are not now used to identify learning disabled children. Teacher evaluation and ability tests are still the basic tools.

Dr. James Gallagher.

GALLAGHER: There've been a variety of tests that have been developed that are specifically designed to diagnose learning disabilities. Most of these try and identify the various skill areas and to see if the youngster has special problems in those areas. For example, they'll have tests of auditory preception to see if their problem is that they can't decode the world around them through sound. They'll have visual decoding items that say is it that they are seeing things but they can't interpret what they see, or is it that they have problems with associating ideas with one another, that they see two things and everybody thinks they connect them up, but they really don't. So there are a variety of special tests, each one designed to identify those areas that might be the problem. And on the basis of the kind of profile of results, on the strength and weaknesses that the youngster shows on these kinds of tests, you then are able to judge, many times, what the major problem area is and you can build a remedial program around that.

REINHARDT: Dr. James Gallagher of the Frank Porter Graham Child Development Center in North Carolina. He was interviewed for Options in Education by Barbara Bernhardt.

CHILDREN LEARN AT DIFFERENT RATES

MERROW: But how good are the tests that Gallagher described? Do they really test what they're supposed to? No, not according to Gerald S. Coles of Rutgers Medical School in New Jersey. In an article in the Harvard Educational Review, Coles says the tests can't be trusted, and that often, so-called learning disabled children are actually just subnormal in intelligence.

REINHARDT: Coles also criticizes the profession and the tests for not recognizing that children learn at dramatically different rates. Schools may in fact be creating a problem rather than remedying one. Some parents agree.

STONE: Some learning problems are a result of developmental lag, and you...

MERROW: Development lag means you're growing more slowly.

STONE: Right. Right. You may get to the same stages that a child got six months. Well, when you figure that you're in school and you're all supposed to bve doing things at the same rate, it can make a big difference.

MERROW: Maybe the school needs to be more flexible.

STONE: Yes. I find this right now. My child, I think, could achieve fine -- he could achieve with very little difficulty if there were adaptations that were made, if they were understanding that some children learn slower, some children learn through different mediums. If they have a visual perceptive problem, use the auditory track. But when they are presented things -- writing on the board or with many of the printed matter that is underdiscernable, and when they're tests are given all through a written test with printed -- and that children do not conceptualize these words, they may know the information. It's that they cannot give it to them in the way that the teacher is asking.

MERROW: But that's part of the test, give me the information the way I'm asking it.

You sound like you're saying that these kids are being treated unfairly on the tests.

STONE: I think you need to find out, you're asking -- is the teacher asking, do you know information. Are you teaching information or are you teaching them to give it to you only in the way that they want it given? Each of us different. We have talents, we have abilities. And the fact that I have different abilities from you does not make me less of a person. It just means I operate differently.

REINHARDT: Ellen Stone, a parent and president of the Naperville, Illinois Chapter of the Association for Learning Disabilities.

AN LD STUDENT'S EARLY YEARS IN SCHOOL

MERROW: She mentioned the emotional problems that learning disabled children develop and carry into adulthood. Time Out To Enjoy, an organization of LD adults, takes its name from the schoolroom where unruly children are sent to be isolated and punished -- the time-out room.

REINHARDT: Diane Ridenhour is 31, a college graduate from Oak Park, Illinois. She reads, writes, and spells at the third grade level.

MERROW: She got through George Williams College using tape recorders and dictation equipment. Today she's working on her Master's Degree in social work.

REINHARDT: But her learning disability created problems all through school.

RIDENHOUR: Dumb. I thought I was dumb or lazy or crazy or retarded. And kids would call me dummy, and especially girls. I mean, little hyperactive girls aren't supposed to be in classrooms, especially if they're little and cute, you know. They -- they want to put us out in the hall. Or, you know, girls aren't supposed to [unintelligible] around their seats. They're supposed to be neat and good readers and good spellers and that sort of thing, and lousy at mathematics. So I was kind of mediocrely good at mathematics and couldn't sit in my seat.

MERROW: And you couldn't read or write.

RIDENHOUR: And I couldn't read or write. No.

MERROW: What did you do instead of -- about reading and writing when everybody else was reading and writing?

RIDENHOUR: Mostly write a letter [?], my pencil would fall off my desk, or I'd try real hard to do what I was supposed to do. And...

MERROW: Are we talking now about all school -- I mean, in junior high school, in high school, and elementary school? You did all those things?

RIDENHOUR: That's right. All the way through school.

But I also became real withdrawn and scared of people. But the time I was in senior high school I couldn't take it anymore. I was placed in a classroom of emotionally disturbed kids at a state hospital.

MERROW: Maybe you were emotionally disturbed?

RIDENHOUR: By that time? I think I was by that time. I was angry, hurt, withdrawn, scared.

MERROW: How did you graduate from high school?

RIDENHOUR: I graduated -- well I start -- the last semester I was in school I was in a school for emotionally disturbed kids, and they gave me a regular diploma when I finished. So that's how I graduated basically. They didn't -- it's like -- they didn't know what was wrong with me. They gave me tutoring -- phonetic tutoring. Like, I had 10 years of remediation and phonetics and all that kind of stuff. And by the time I got to be in senior high school, I thought, you know, all had failed. What could I do, you know. I could get married, which I didn't really want to do at that point, or find a job. And the job market wasn't open, there was nothing I could do, you know. I wanted to be something or do something, you know, and there was nothing there. It felt like the end of the rope was my senior year.

MERROW: Did you grow to hate your own self?

RIDENHOUR: Yeah, yeah. I did a lot of -- at times I think I still do that a little bit, you know, where I just really get angry and say I'm dumb, I'm stupid, I can't do anything right. And then I couldn't figure out -- I knew I was smart, but I didn't know I was smart because everybody else was yelling at me that I was bad. And I got a lot of bad feelings about me, and hating myself.

MERROW: In the course of going through elementary, junior high, and high school, I don't know how many teachers you had, I don't want to guess -- 40, 50. Did any of them respond to you and recognize your problem?

RIDENHOUR: Yes. I had a physical education who was also a science teacher of mine, who decided that maybe she could help me. And one way she might be

able to help me is to read my -- to get somebody to read my examinations to me in 7th grade. The problem with that was that she forgot to read my book to me and no one took the notes for me. So it looks like I got the same grade on the test that I would have gotten if I'd read it myself. Because that's how much information I had.

And they also in high school, set me up with a buddy, where a person was sitting in front of me and I could ask them what I was reading. But what they forgot again, was I was supposed to ask them one word. And if I really utilized that that buddy, the buddy'd never get any work done. So I would just every once in a while ask for some help from her. I wouldn't utilize her. I'd get kind of scared of that.

MERROW: Are there many people, young adults -- you're 30 years old -- like you walking around?

RIDENHOUR: My guess is there's probably 10 percent of the population that's maybe not as severe like me, but there are a lot of people out there that -- walking around -- that are learning disabled, can't read or write. The...

MERROW: But can do other things well.

RIDENHOUR: That's right.

MERROW: Because there may be a lot of people walking around who can't read or write or can't do numbers or can't do much, but who aren't very smart.

RIDENHOUR: Right. Well, that could be true, you know, but there are certainly people like myself out there too who can do a lot of things. They may be your local car mechanic, and a super mechanic, you know. But they know they can't read or write. They're feeling retarded and crazy. Or they're in a mental hospital because they've just given up. And they're sitting out in the back woods someplace, and they say, that's it, I can't stand it any longer. Or they get angry at society and gone out and robbed a bank or stole a car.

REINHARDT: Diane Ridenhour, a learning disabled adult, and a founding member of Time Out To Enjoy, an organization of learning disabled adults.

LD STUDENT AT A SAN FRANCISCO CLINIC

MERROW: Trilby, who's nearly an adult at age 19, isn't out stealing cars or robbing banks either. She's working to overcome her learning disability at a clinic in San Francisco.

VENABLE: ...L.

TRILLBY: Eight.

VENABLE: Good.

TRILLBY: Safe.

VENABLE: Good.

TRILLBY: I. Pile?
TEACHER: Very nice, Trilby.

TRILLBY: A. Sane.

TEACHER: Good.

TRILLBY: U. Fuse.

TEACHER: Beautiful.

TRILLBY: I. Light.

VENABLE: Good. Just great.

TRILLBY: U. Lute.

VENABLE: Good.

TRILLBY: U. 'Cause.

VENABLE: Wait a minute. You're thinking about that word "because." That's just going to throw you off. Say "U" and then go.

TRILLBY: Q.

VENABLE: Yeah.

TRILLBY: Cuse.

VENABLE: Cuse. Accuse.

TRILLBY: Accuse.

VENABLE: Okay?

TRILLBY: A. Sake.

VENABLE: Good girl.

TRILLBY: I. Bind.

VENABLE: Good. Combine.

TRILLBY: I. Pile.

VENABLE: Good.

TRILLBY: I. Eyes. Zuh.

VENABLE: Okay.

TRILLBY: A.

VENABLE: This was the one I was going to take it, but you got t, so I put it back in.

TRILLBY: Tate. Great.

VENABLE: Good.

TRILLBY: Oops, I forgot the A. That's an A. Okay, now this one's E. Feet.

VENABLE: Very nice. Complete.

TRILLBY: U. Clude
VENABLE: Good.

TRILLBY: U. Beaut.

VENABLE: Good.

TRILLBY: A. Late.

VENABLE: Good.

TRILLBY: I. Pie.

VENABLE: Very nice. Okay.

TRILLBY: Okay. U. Mune.

VENABLE: Very nice. Like commune or immune to a disease.

TRILLBY: I. Lie. I. Quire.

VENABLE: Good. Like require.

TRILLBY'S TEACHER'S METHODS OF TEACHING

I think we're going to take a break from that for a minute. I want you to read some more of these words and tell me the definitions. Okay?

I know that she has some kind of language disability.

REINHARDT: What is it she can't do?

VENABLE: She can't comprehend a lot of vocabulary. She can't pick up new words very easily because she doesn't remember what they sound like. Shey has trouble with the sequence of syllables. She'll say thinks like -- let me see if I can do this. It's hard for me to even say it backwards. Percendipular for perpendicular. If you say perpendicular and she doesn't know the word she'll -- if you ask her to repeat it, she'll mix up the syllables.

And she sometimes gets the boundaries of a word wrong.

REINHARDT: She'll add on to a word.

VENABLE: Yeah. An example of the way that happens in learning is -- I'll give you an example with my two-year-old. When she learned the words "apartment building," the first time she heard it was in the context of a sentence, "that's an apartment building." And so she thought the word was "anapartment," which she changed to "mapartment." But that's where the bilabial at the beginning came from. And now she'll say things like -- not only "that's mapartment building" but what a big mapartment building. Well, Trilby does the same thing. This word "atrocious" was very interesting. I asked her what atrocious meant, she had no idea. But she said she knew the word "natrocious." And I said what does that mean. And she said, big. So two things happened. One is, she got the boundaries of the word wrong by probably hearing it with an article in front of it. And the second thing is that she heard the word in a particular context and picked up the wrong part of the context.

Like I might have said to her, that's an atrocious building. And it's also a big building. So she might have thought it was big. But the fact that I thought it was ugly wasn't the thing that struck her. So she's probably heard the word 'atrocious" in that context with that meaning. So she has a lot of meanings that are a little funny.

These are all things that could be worked on and could be improved. But whether those are the most important focus for her life, I don't know. She is highly motivated to improve, and she does remember things when you teach them to her, although takes some repetition.

REINHARDT: But even to work vocationally, wouldn't she need more skills than she has?

VENABLE: Possibly. The thing is, I think that she could do most any job that -- if she's bright enough, and I think she is -- she could probably

do most any job that doesn't have a lot of reading and writing demands. And I don't think she could, even with training, she's going to be able to do a highly verbal job. She's not going to be able to be a counselor and have to write reports, you know. I don't think she could be a secretary. I don't think those are reasonable goals for her and I don't see why she should pursue those. And I think those are going to be failure areas for her.

She could certainly improve her reading to the point where she would be better able to read textbooks and learn skills through reading.

TRILLBY: Terrific.

VENABLE: Yeah, can you use that in a sentence?

TRILLBY: Terrific. You're a terrific teacher.

VENABLE: Good. Thank you.

How about this?

TRILLBY: Ther-mos-ta-ate. Thermome -- no, that's not thermometer. The -- is that a R?

VENABLE: Yeah, that's an R. And you were right when you said "ther."

TRILLBY: Ther-mos-state.

VENABLE: Okay, now. That's S-T-A-T, right? Supposing that was on one of these syllables, S-T-A-T.

TRILLBY: Stay. St.

VENABLE: Supposing we were going through these things. And the first thing you did was you say the A by itself -- where are you cards? There they are.

VENABLE: Silent A or long A?

TEACHER: Short A, right? There's no such thing as silent A.

VENABLE: I mean, short A. Short A is right there.

TEACHER: Can you say it?

VENABLE: Uh-huh. That's aah.

TEACHER: That's aah. All right, so what's this?

TRILLBY: S-at. St-at. Stat.

VENABLE: Stat.

TRILLBY: Okay. Ther-mo-stat. Thermostat.

VENABLE: Very nice. Okay, now do you know what that is?
TRILLBY: A thermostat. Temperature.

VENABLE: What does it have to do with temperature?

TRILLBY: Yeah, the thermometer thing.

INTERVIEW WITH TRILLBY

WISSEL: Can you tell me how old you are?

TRILLBY: Nineteen.

WISSEL: And how long have you been coming to the Learning Disability Clinic?

TRILLBY: Six weeks?

WISSEL: What prompted you to come here? Why did -- why did you come here.

TRILLBY: Oh, to learn. To learn words. I mean, to be smarter.

WISSEL: What kind of problems did experience when you were growing up and going to grade school and junior high school? You couldn't read. Did people make fun of you? Did they say you were dumb?

TRILLBY: Constantly. They always said that. They -- most of the people that were not as smart as me would even laugh at me because they thought it was funny because they didn't say it, and I did, you know. And pretty soon, you know, I just didn't say nothing to anybody.

WISSEL: What do you want to do after you leave here?

TRILLBY: Oh, I want to be a handicap teacher. You know, sit on the floor with the kids and teach them how to tie their shoe or something, you know, something like that.

WISSEL: Are you going to college?

TRILLBY: Oh, some day. I want to move out first.

WISSEL: Move out?

TRILLBY: Out of my mom and dad's house. Be on my own, get me a little car, finally.

MERROW: Trilby, a 19 year old with a learning disability, and her teacher, Gail Venable, at a clinic for the learning disabled at San Francisco's State University.

Thanks to reporter Paula Wissel.

* * *

REINHARDT: If you'd like a complete transcript of this OPTIONS IN EDUCATION series on learning disabilities, you may have it by sending us two dollars. It includes a list of books and articles about learning disabilities.

MERROW: The cassettes are available also for ten dollars.

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REINHARDT: Let me recap. The transcript, two dollars; the cassette, ten dollars; and the program guide free for the asking.

MERROW: Here's our address again. National Public Radio -- Education, Washington, D.C., 20036.

11

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For OPTIONS IN EDUCATION, I'm Barbara Reinhardt.

MERROW: I'm John Merrow, and this is NPR, National Public Radio.

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